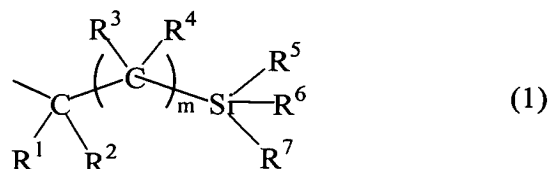


The following listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Presently Amended) A polymer having silicon-containing groups of formula (1):



wherein

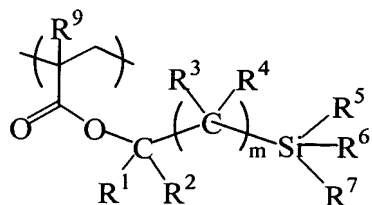
one of R^1 and R^2 is a cyclic alkyl group of 1 to 20 carbon atoms and the other is hydrogen or a straight, branched or cyclic alkyl group of 1 to 20 carbon atoms, or R^1 and R^2 , taken together, may form an aliphatic hydrocarbon ring in which $-\text{CH}_2-$ may be substituted with a $-\text{Si}(\text{R}^8)_2-$ group, and R^3 and R^4 each are independently hydrogen or a straight, branched or cyclic alkyl group of 1 to 20 carbon atom, or R^3 and R^4 , taken together, may form an aliphatic hydrocarbon ring in which $-\text{CH}_2-$ may be substituted with a $-\text{Si}(\text{R}^8)_2-$ group,

R^5 to R^7 each are independently a straight, branched or cyclic alkyl or fluorinated alkyl group of 1 to 20 carbon atoms or aryl group of 6 to 20 carbon atoms,

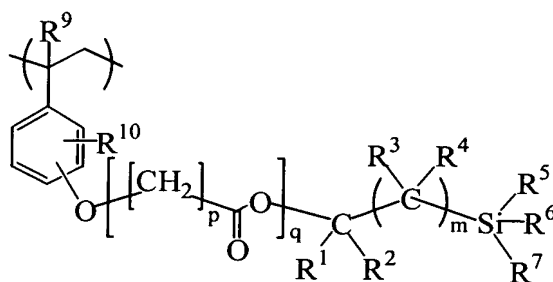
R^8 is independently a straight or branched alkyl group of 1 to 4 carbon atoms, and m is 1 or 2.

2. (Previously Presented) A polymer of claim 1, wherein said polymer contains carboxylic acid, alcohol, or phenol groups or combinations thereof, and hydrogen atoms of hydroxyl groups on at least on one of said carboxylic acid, alcohol or phenol groups is substituted with the silicon-containing group of formula (1).

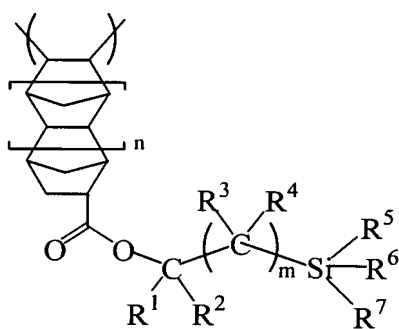
3. (Presently Amended) A polymer comprising recurring units of one of the general formulae (2) to (5):



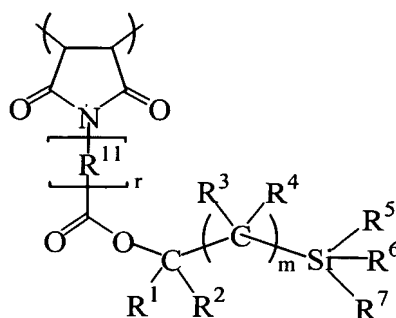
(2)



(3)



(4)



(5)

wherein

one of R^1 and R^2 is a cyclic alkyl group of 1 to 20 carbon atoms and the other is hydrogen or a straight, branched or cyclic alkyl group of 1 to 20 carbon atoms, or R^1 and R^2 , taken together, may form an aliphatic hydrocarbon ring in which $-CH_2-$ may be substituted with a $-Si(R^8)_2-$ group, and R^3 and R^4 each are independently hydrogen or a straight, branched or cyclic alkyl group of 1 to 20 carbon atom, or R^3 and R^4 , taken together, may form an aliphatic hydrocarbon ring in which $-CH_2-$ may be substituted with a $-Si(R^8)_2-$ group,

R^5 to R^7 each are independently a straight, branched or cyclic alkyl or fluorinated alkyl group of 1 to 20 carbon atoms or aryl group of 6 to 20 carbon atoms,

R^8 is independently a straight or branched alkyl group of 1 to 4 carbon atoms,

R^9 is hydrogen, a straight, branched or cyclic alkyl group of 1 to 20 carbon atoms, or $CH_2CO_2R^{12}$,

R^{10} is hydrogen or a straight, branched or cyclic alkyl group of 1 to 20 carbon atoms,

R^{11} is a straight, branched or cyclic alkylene group of 1 to 10 carbon atoms,

R^{12} is hydrogen or a straight, branched or cyclic alkyl group of 1 to 20 carbon atoms, m is 1 or 2, n is a number of 0 to 5, p is a number of 1 to 5, each of q and r is 0 or 1.

4. (Original) A chemically amplified positive resist composition comprising:
 - (A) the polymer of claim 1,
 - (B) a photoacid generator, and
 - (C) an organic solvent.
5. (Original) The resist composition of claim 4 further comprising a basic compound.
6. (Original) A chemically amplified positive resist composition comprising:
 - (A) the polymer of claim 1,
 - (B) a photoacid generator,
 - (C) an organic solvent, and
 - (D) a dissolution rate inhibitor having an acid labile group.
7. (Original) The resist composition of claim 6 further comprising a basic compound.
8. (Previously Presented) A process for forming a pattern, comprising:

applying a positive resist composition of claim 4 onto an organic film on a substrate to form a coating,

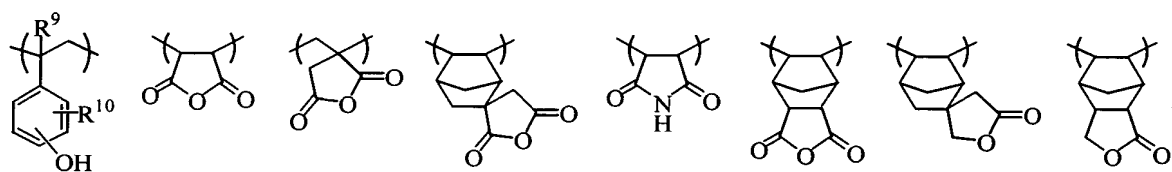
prebaking the coating to form a resist film,

exposing the resist film in a pattern circuit region to radiation,

post-exposure baking the resist film,

developing the resist film with an aqueous alkaline solution to dissolve away the exposed area, thereby forming a resist pattern, and

processing the organic film with an oxygen plasma generated by a dry etching apparatus.
9. (Previously Presented) A chemically amplified positive resist composition comprising:
 - (A) the polymer of claim 3,



(53)

(54)

(55)

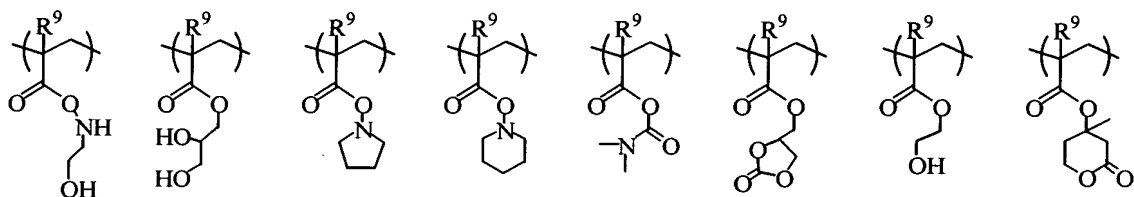
(56)

(57)

(58)

(59)

(60)



(61)

(62)

(63)

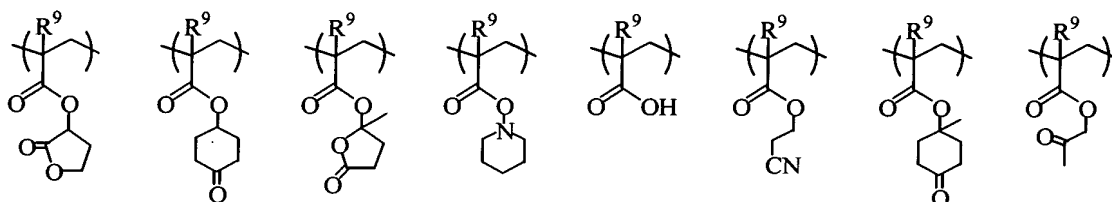
(64)

(65)

(66)

(67)

(68)



(69)

(70)

(71)

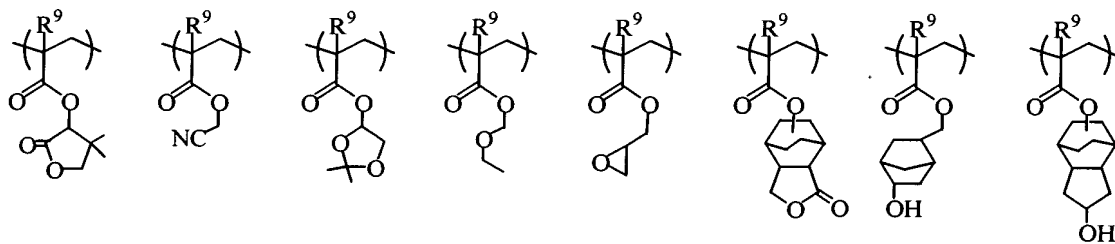
(72)

(73)

(74)

(75)

(76)



(77)

(78)

(79)

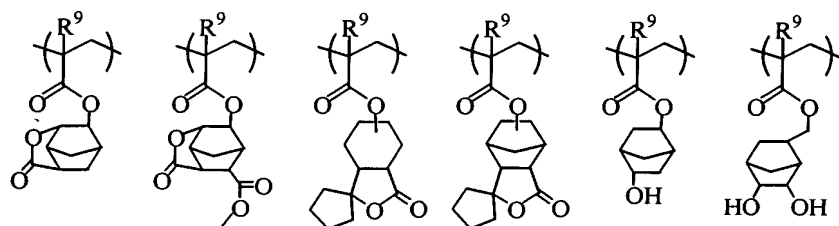
(80)

(81)

(82)

(83)

(84)



(85)

(86)

(87)

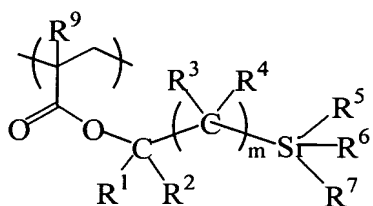
(88)

(89)

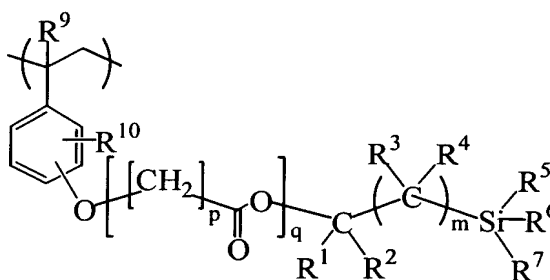
(90)

wherein R^9 is hydrogen, a straight, branched or cyclic C_{1-20} alkyl group, or $CH_2CO_2R^{12}$, and R^{12} is hydrogen or a straight, branched or cyclic C_{1-20} alkyl group.

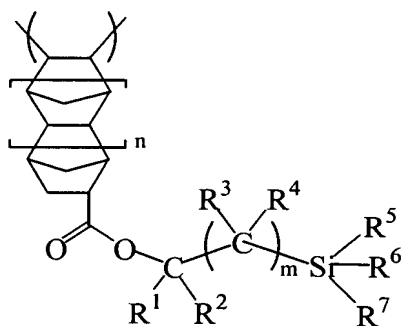
14. (Presently Amended) A polymer comprising recurring units of one of formula (2) to (5) and recurring units of (56) to (90):



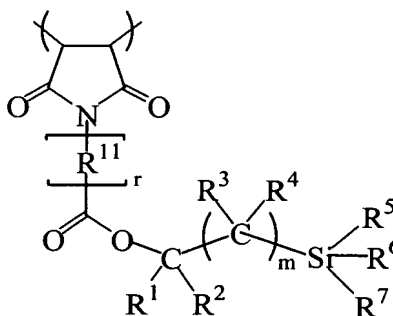
(2)



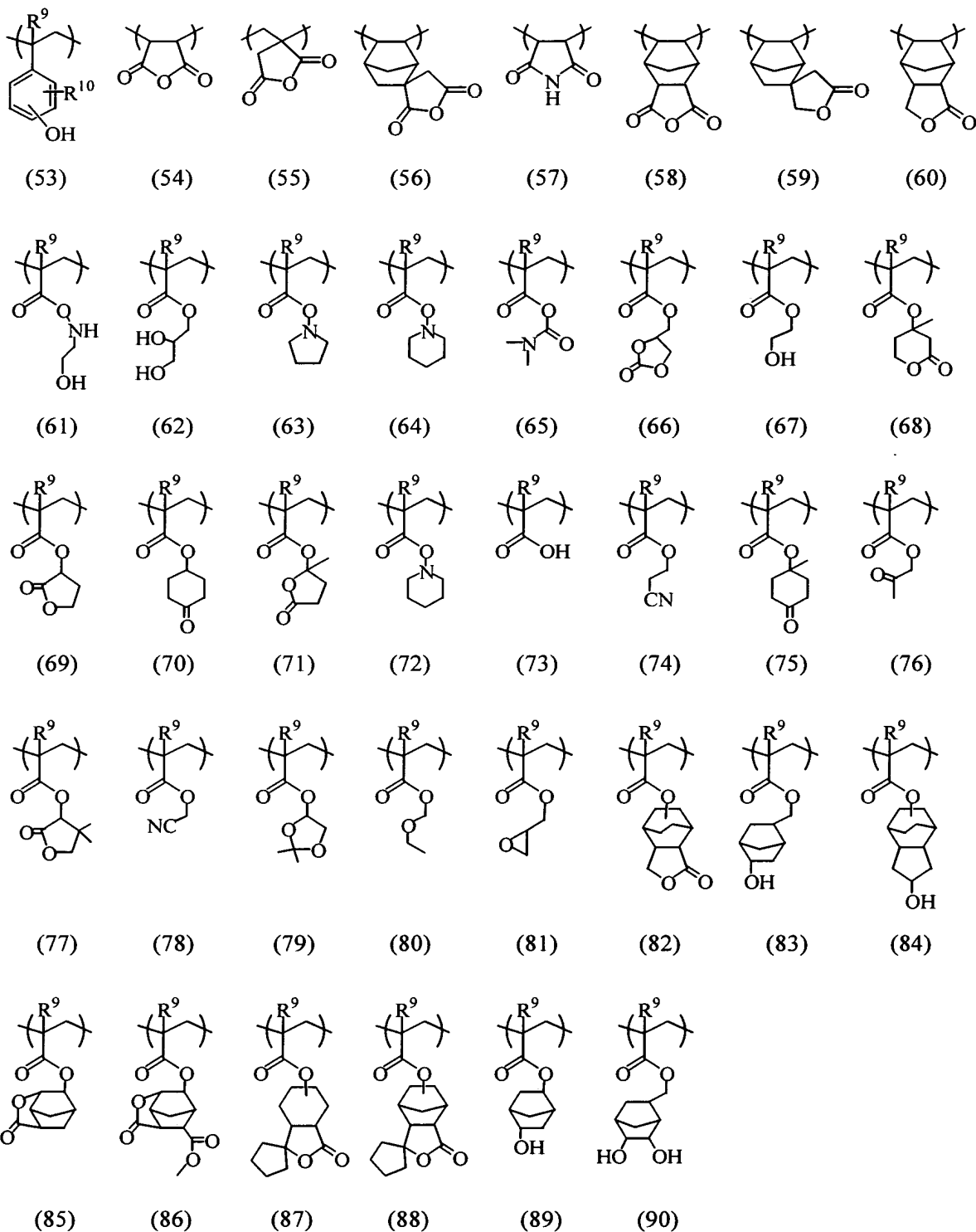
(3)



(4)



(5)



wherein

wherein one of R^1 and R^2 is a cyclic alkyl group having 1 to 20 carbon atoms and the other is to R^4 ~~each are independently~~ hydrogen or a straight, branched or cyclic alkyl group of

1 to 20 carbon atoms, or R^1 and R^2 , taken together, optionally form an aliphatic hydrocarbon ring in which $-CH_2-$ is optionally substituted by $-Si(R^8)_2-$ group, and R^3 and R^4 are each independently hydrogen or a straight, branched or cyclic alkyl group of 1 to 20 carbon atoms, or R^3 and R^4 , taken together, optionally form an aliphatic hydrocarbon ring in which $-CH_2-$ is optionally substituted by $-Si(R^8)_2-$,

R^5 to R^7 each are independently a straight, branched or cyclic alkyl or fluorinated alkyl group of 1 to 20 carbon atoms or an aryl group of 6 to 20 carbon atoms,

R^8 is independently a straight or branched alkyl group of 1 to 4 carbon atoms,

R^9 is hydrogen, a straight, branched or cyclic C_{1-20} alkyl group, or $CH_2CO_2R^{12}$,

R^{10} is hydrogen or a straight, branched or cyclic C_{1-20} alkyl group,

R^{11} is a straight, branched or cyclic C_{1-10} alkylene group,

R^{12} is hydrogen or a straight, branched or cyclic C_{1-20} alkyl group,

m is 1 or 2,

n is a number of 0 to 5,

p is a number of 1 to 5, and

each of q and r is 0 or 1.

15. (Previously Presented) A chemically amplified positive resist composition comprising:

- (A) the polymer of claim 14,
- (B) a photoacid generator, and
- (C) an organic solvent.

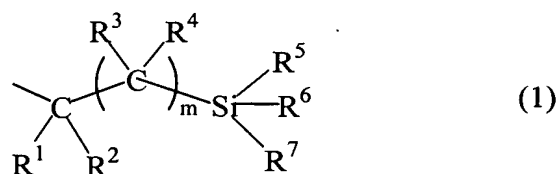
16. (Previously Presented) A resist composition of claim 15, further comprising a basic compound.

17. (Previously Presented) A chemically amplified positive resist composition comprising:

- (A) the polymer of claim 14,
- (B) a photoacid generator,
- (C) an organic solvent, and
- (D) a dissolution rate inhibitor having an acid labile group.

18. (Previously Presented) A resist composition of claim 17, further comprising a basic compound.

19. (Presently Amended) A monomer having a silicon-containing groups of formula (1):

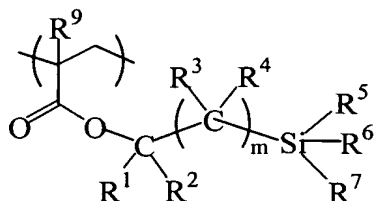


wherein one of R¹ and R² is a cyclic alkyl group having 1 to 20 carbon atoms and the other is to R⁴ each are independently hydrogen or a straight, branched or cyclic alkyl group of 1 to 20 carbon atoms, or R¹ and R², taken together, optionally form an aliphatic hydrocarbon ring in which -CH₂- is optionally substituted by -Si(R⁸)₂- group, and R³ and R⁴ are each independently hydrogen or a straight, branched or cyclic alkyl group of 1 to 20 carbon atoms, or R³ and R⁴, taken together, optionally form an aliphatic hydrocarbon ring in which -CH₂- is optionally substituted by -Si(R⁸)₂-,

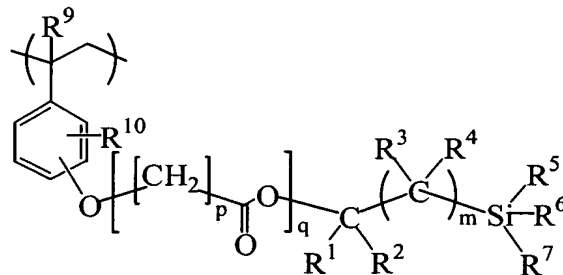
R⁵ to R⁷ each are independently a straight, branched or cyclic alkyl or fluorinated alkyl group of 1 to 20 carbon atoms or an aryl group of 6 to 20 carbon atoms,

R⁸ is independently a straight or branched alkyl group of 1 to 4 carbon atoms, and m is 1 or 2.

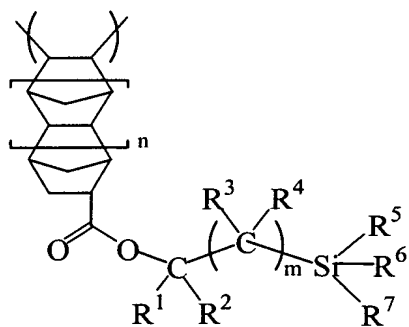
20. (Previously Presented) A monomer capable of forming units of one of formulae (2) to (5):



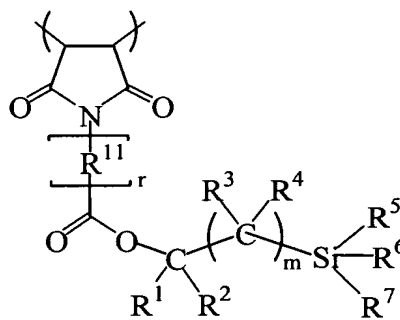
(2)



(3)



(4)



(5)

wherein

one of R^1 and R^2 is a cyclic alkyl group having 1 to 20 carbon atoms and the other is to R^4 each are independently hydrogen or a straight, branched or cyclic alkyl group of 1 to 20 carbon atoms, or R^1 and R^2 , taken together, optionally form an aliphatic hydrocarbon ring in which $-CH_2-$ is optionally substituted by $-Si(R^8)_2-$ group, and R^3 and R^4 are each independently hydrogen or a straight, branched or cyclic alkyl group of 1 to 20 carbon atoms, or R^3 and R^4 , taken together, optionally form an aliphatic hydrocarbon ring in which $-CH_2-$ is optionally substituted by $-Si(R^8)_2-$,

R^5 to R^7 each are independently a straight, branched or cyclic alkyl or fluorinated alkyl group of 1 to 20 carbon atoms or aryl group of 6 to 20 carbon atoms,

R^8 is independently a straight or branched alkyl group of 1 to 4 carbon atoms,

R^9 is hydrogen, a straight, branched or cyclic alkyl group of 1 to 20 carbon atoms, or $CH_2CO_2R^{12}$,

R^{10} is hydrogen or a straight, branched or cyclic alkyl group of 1 to 20 carbon atoms,

R^{11} is a straight, branched or cyclic alkylene group of 1 to 10 carbon atoms,

R^{12} is hydrogen or a straight, branched or cyclic alkyl group of 1 to 20 carbon atoms,

m is 1 or 2, n is a number of 0 to 5, p is a number of 1 to 5, each of q and r is 0 or 1.